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Dec 9 9 39 AM '92

ADD. SERVICES

December 8, 1992

HAND DELIVER

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DEC - 8 1992

Donna R. Searcy
Secretary
Federal Communications Commission
Washington, D.C. 20554

ATTN: FM Branch, Audio Services Division

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

RE: 1800B3-JDB/Application of Nazareth Communications, Inc.
for a New Noncommercial FM Broadcast Station on Channel
203C2, Williamston, South Carolina (BPED-920811MA)

Dear Ms. Searcy:

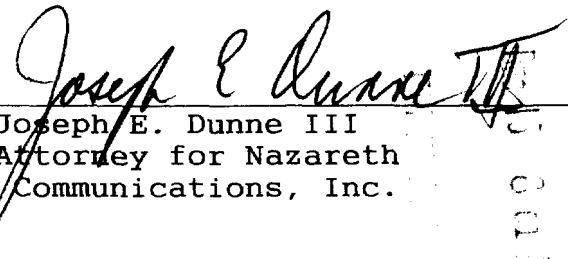
Transmitted herewith in triplicate on behalf of Nazareth Communications, Inc. is an amendment to the above-referenced pending application.

This amendment is required by and filed in response to the Commission's letter of November 2, 1992 addressed to the applicant. The attached engineering includes revised calculations concerning the applicant's proposed interference to WJBF-TV, channel 6, Augusta, Georgia, using the same methodology as used by the FM Branch staff. These revised calculations show that Nazareth is in full compliance with section 73.215(c) of the Commission's rules.

Should any questions arise concerning this matter, kindly contact the undersigned directly.

Respectfully submitted,

MAY & DUNNE, CHARTERED

By: 
Joseph E. Dunne III
Attorney for Nazareth
Communications, Inc.

JED:gmc:A75
enclosures

xc: Jim Bradshaw (FCC Room 318, Hand Deliver)
Nazareth Public File

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DEC - 8 1992

DEC 9 9 39 AM '92 FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

AUDIO SERVICES

Date: 12/2/92

Donna R. Searcy
Secretary
Federal Communications Commission
Washington, D.C. 20554

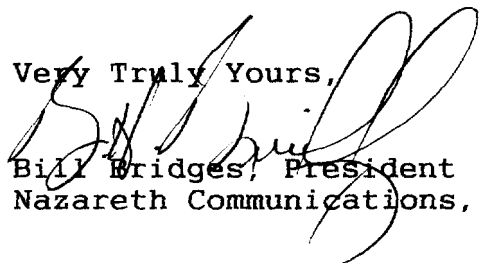
ATTN: FM Branch/1800B3-JDB

RE: Amendment to Application of Nazareth Communications, Inc.
for Channel 203C2, Williamston, South Carolina (BPED-
920811MA)

Dear Ms. Searcy:

Please accept the attached engineering information as an amendment
to the above-referenced pending application.

Very Truly Yours,


Bill Bridges, President
Nazareth Communications, Inc.

Village of Trumansburg)

Tompkins County) SS.

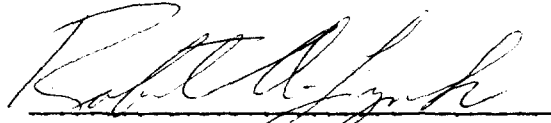
State of New York)

Robert A. Lynch, being duly sworn upon his oath, deposes and states that:

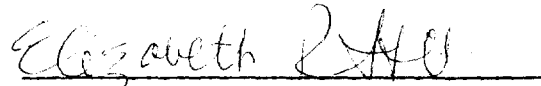
He is an employee and a consultant with the firm Independent Broadcast Consultants, Inc., with offices at 110 County Road 146, Trumansburg, New York 14886-9721.

His qualifications are a matter of record with the Federal Communications Commission, having filed numerous technical reports with them in the past and having participated in other technical projects and applications which have been accepted for filing and subsequently were granted construction permits.

That facts contained in this report subscribed by him are true of his own personal knowledge, except those stated on information and belief, and those facts he verily believes to be true.


ROBERT A. LYNCH

Subscribed and sworn before me this 18th day of November, 1992.


NOTARY PUBLIC

ELIZABETH R. STILES
Notary Public, State of New York
No. 4883130
Qualified in Seneca County
Commission Expires January 20, 1993

NAZARETH COMMUNICATIONS, INC.

Proposed New NCE FM Station
Williamston, SC
Ch. 203C2; 50kW, DA, 91m AAT

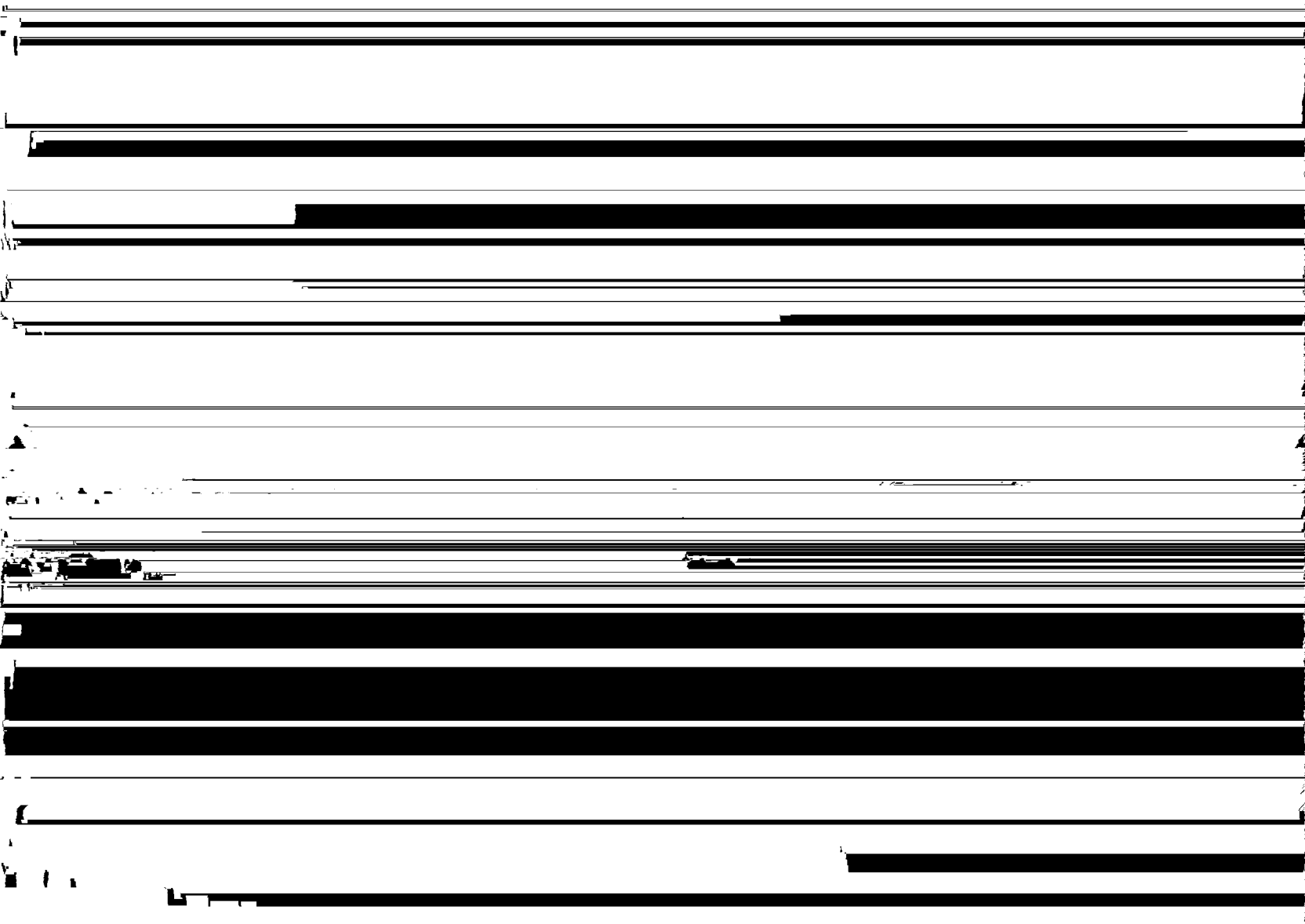
ENGINEERING STATEMENT

This report has been prepared on behalf of Nazareth Communications, Inc, applicant under BPED-920811MA for a new non-commercial educational FM broadcast station to serve Williamston, South Carolina. The engineering contained herein seeks to amend BPED-920811MA insofar as it addresses the predicted impact this proposal would have upon interference to licensed television station WJBF-TV, Augusta, GA, operating on Channel 6. The broadcast facilities proposed by BPED-920811MA remain unchanged from the originally-filed application. This amendment merely revises the interference calculations and predicted TV-6 interference population estimates to conform to Commission-specified methodology.

In its advisory of November 2, 1992 to Nazareth and to Toccoa Falls College, applicant under BPED-920113ML for a mutually-exclusive NCE FM proposal at Belton, SC, the Commission noted a deficiency in the Nazareth application as it estimated predicted TV-6 interference. As the Commission correctly observed, Nazareth utilized in its TV-6 study a maximum (main lobe) effective radiated power of 50 kilowatts, representing the signal's horizontally polarized component only. The Commission directed Nazareth's application be amended to incorporate in its

instances, § 73.215(e)(4)(ii) establishes the procedure for calculating the horizontal-only equivalent in such imbalanced situations. Nazareth's application, however, specifies circular polarization with equal levels of horizontal and vertical polarization. Nowhere else in the FM rules does an applicant have to compute potential interference based on ERP levels in excess of the maximum ERP for whichever polarization is greater. However, following discussions with Mr. James Bradshaw, engineer with the FM Branch and the engineer who processed Nazareth's application, the undersigned has become aware that Commission policy interprets § 73.525(e)(1)(iv) to always require ERP be based on the sum of horizontally polarized and (not "or") the horizontal equivalent of the vertically polarized signal components, regardless of the relative levels of horizontal and vertical ERP.

Provided as part of this amendment are amended FIGURES 10A, 10B, 10C and 10D. In respective order, these exhibits provide revised population estimates within the affected FM/MLRP TV interference areas portions of connected U.S.



estimates are based upon the 1990 United States Census, as were those of the

POPULATION ESTIMATES
FM/WJBF-TV INTERFERENCE AREA

Nazareth Communications, Inc.
 Williamston, SC
 Ch. 203C2; 50.0 kW, 91m AAT

I. INTERFERENCE AREA "A":

Laurens County:

Joanna Division:

(Excluding Joanna CDP)

Total Population (1990):	857	persons
Interference Land Area (%):	9.76	%
Population in Interference Area	<u>84</u>	persons

II. INTERFERENCE AREA "B":

Abbeville County:

Abbeville City

Total Population (1990):	5,778	persons
Interference Land Area (%)	34.88	%
Population in Interference Area:	<u>2,015</u>	persons

Abbeville Division:

(Excluding Abbeville City)

Total Population (1990):	5,566	persons
Interference Land Area:	4.74	%
Population in Interference Area:	<u>264</u>	persons

Calhoun Falls Division:

(Excluding Calhoun Falls Town)

Total Population (1990):	961	persons
Interference Land Area (%)	6.19	%
Population in Interference Area:	<u>59</u>	persons

Antreville-Lowndesville Division:

(Excluding Lowndesville Town)

Total Population (1990):	2,403	persons
Interference Land Area (%):	9.44	%
Population in Interference Area:	<u>227</u>	persons

<u>TOTAL POPULATION IN INTERFERENCE AREAS:</u>	<u>2,649</u>	persons
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(Total is 351 persons below the 3,000-person limit established by § 73.525(c).)

All interference estimates exclude those areas located within the 80dBu "City Grade" contour of WAXA-TV, Anderson, SC, a common (ABC) network affiliate with WJBF-TV (as per § 73.525(e)(3)(iii).)

FIGURE 10B Amended

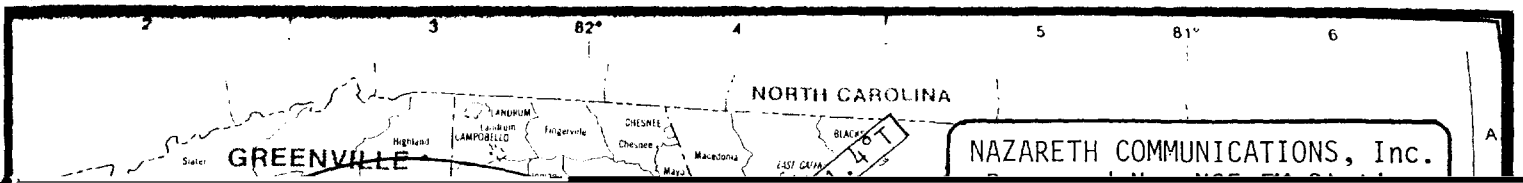
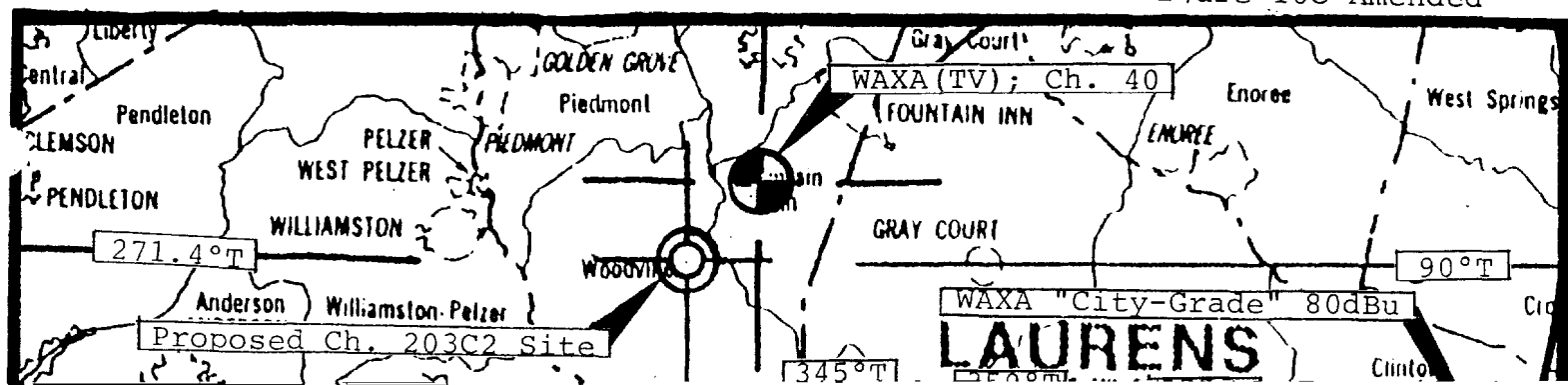


Figure 10C Amended



COMPUTATION OF DISTANCE TO WJBF-TV INTERFERENCE CONTOURS

Nazareth Communications, Inc.

Williamston, SC

Ch. 203C2; 50.0 kW, 91m AAT

BEARING FROM FM	RAD. CTR. HAAT	EFFEC. RAD. POWER	DISTANCE TO FM/TV-6 INTERFERENCE CONTOUR											
			58dBu	57dBu	56dBu	55dBu	54dBu	53dBu	52dBu	51dBu	50dBu	49dBu	48dBu	47dBu
90°T	99.4 m	28.5 kW	-	-	-	-	-	-	-	41.2km	42.8km	44.3km	45.9km	47.5km
	326.2 ft	14.5dBk	-	-	-	-	-	-	-	25.6mi	26.6mi	27.5mi	28.5mi	29.5mi
135°T	122.1 m	51.25kW	41.2km	42.2km	44.1km	45.9km	47.5km	48.6km	49.9km	51.0km	52.5km	54.1km	56.2km	57.0km
	400.7	17.10dBk	25.6mi	26.2mi	27.4mi	28.5mi	29.5mi	30.2mi	31.0mi	31.7mi	32.6mi	33.6mi	34.9mi	35.4mi
150°T	119.1 m	51.25kW	40.7km	41.8km	43.8km	45.5km	47.0km	48.3km	49.1km	50.4km	52.3km	-	-	-
	390.9 ft	17.10dBk	25.3mi	26.0mi	27.2mi	28.3mi	29.2mi	30.0mi	30.5mi	31.3mi	32.5mi	-	-	-
165°T	97.2 m	51.25kW	36.5km	37.5km	39.4km	41.0km	42.3km	45.5km	46.7km	47.5km	48.4km	-	-	-
	319.0 ft	17.10dBk	22.7mi	23.3mi	24.5mi	25.5mi	26.3mi	28.3mi	29.0mi	29.5mi	30.1mi	-	-	-
180°T	101.6 m	51.25kW	37.8km	38.9km	40.2km	42.3km	43.6km	45.9km	47.3km	48.0km	49.4km	51.0km	52.3km	-
	333.5 ft	17.10dBk	23.5mi	24.2mi	25.0mi	26.3mi	27.1mi	28.5mi	29.4mi	29.8mi	30.7mi	31.7mi	32.5mi	-
195°T	103.6 m	51.25kW	-	-	-	-	-	46.3km	47.5km	48.3km	49.6km	51.2km	52.6km	54.6km
	340.0 ft	17.10dBk	-	-	-	-	-	28.8mi	29.5mi	30.0mi	30.8mi	31.8mi	32.7mi	33.9mi
210°T	96.2 m	51.25kW	-	-	-	-	-	-	-	47.3km	48.3km	49.4km	51.0km	52.5km
	315.7 ft	17.10dBk	-	-	-	-	-	-	-	29.4mi	30.0mi	30.7mi	31.7mi	32.6mi

Computations done at proposed FM bearings for all pertinent interfering contours at which WJBF-TV service contour (from 58dBu to 47dBu) is possible to intersect. Interference area located within WAXA-TV city-grade contour is ignored in compliance with § 73.525(e)(3)(iii).

Effective radiated power for proposed FM station based upon the formula specified in § 73.525(e)(4)(ii) utilizing as total ERP the sum of horizontal ERP and a fraction of vertical ERP. Within interference areas, no community exists with population in excess of 50,000 persons.

At pertinent azimuths from the proposed station, the 6dB adjustment for receiver antenna directivity is utilized in compliance with § 73.525(e)(1)(iii).